

A photograph of a residential street in Atlantic City that has been completely flooded. In the background, there are several multi-story houses, including a prominent white two-story house with a porch. A red fire escape is visible on one of the buildings. In the foreground, a yellow fire hydrant is partially submerged in the dark, rippling floodwater. A street sign and a black lamppost are also visible in the water. The sky is overcast with grey clouds.

Atlantic City Floodplain Management Plan

September 4, 2019

Rutala Associates

Atlantic City Floodplain Management Committee

Josh Lavin, real estate

Robert Johnson, resident

Tom Heist, insurance

Joe Ciapanna, banking industry

Art Ponzio, engineer

Maisha Scudder-Moore, Mayor Gilliam's Chief of Staff

Anthony Cox, City Building Inspector

Chief Scott Evans, City Fire Chief and OEM Coordinator

Barbara Woolley-Dillon, Director of Planning & Development

Flood Management

- Flooding will continue to occur on the barrier islands
- It is not “if” flooding will occur, it is “when”
- Preparation is key – anticipate future events and prepare
 - Evacuation Plan – identify a safe place to go
 - Maintain Flood Insurance
 - Know who to call to shut off electric and gas
 - Put insurance, valuables, medicine, etc. in a safe place

Why Develop a Floodplain Management Plan?

- 89 percent of Atlantic City's developed area is in the Special Flood Hazard Area
- The Floodplain Management Plan is unique and unlike any other plans - it specifically addresses flooding and will serve as the basis for flooding-specific improvements
- Every \$1 Invested in Disaster Mitigation Saves \$6 !
- This is not an engineering study

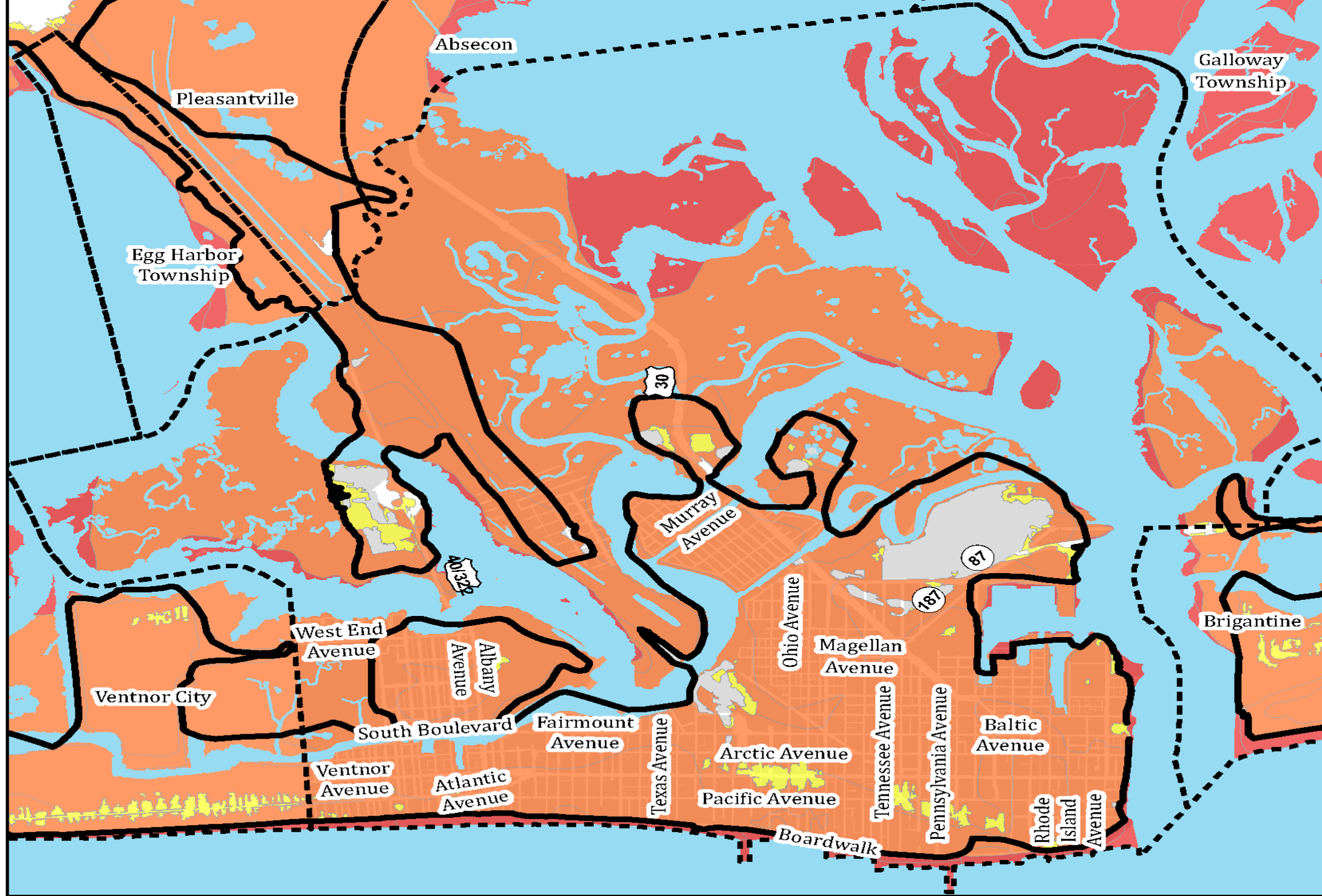
Planning for Flooding: Why?

- Atlantic City will be one of the first communities in Atlantic County to qualify for Class 4 (30% discount)- a Floodplain Management Plan is a prerequisite
- Federal Flood Insurance

Federal flood insurance policies	6,925
Value of properties insured	\$1,410,106,600
Annual premiums	\$5,940,849
Class 6 annual savings	\$1,464,210
Class 4 added annual savings	\$2,192,720

Atlantic City

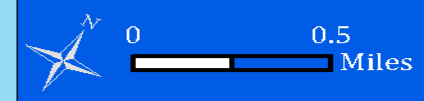
Flood Zones (Preliminary)



- LIMWA—
- X
- AE
- VE

Data Sources:
FEMA, NJDEP,
NJOIT-OGIN, USGS

Rutala Associates



Planning 10 Step Process

1. Organize
2. Involve the public
3. Coordinate
4. Assess the hazard
5. Assess the problem
6. Set goals
7. Review possible activities
8. Draft an action plan
9. Adopt the plan
10. Implement, evaluate, revise



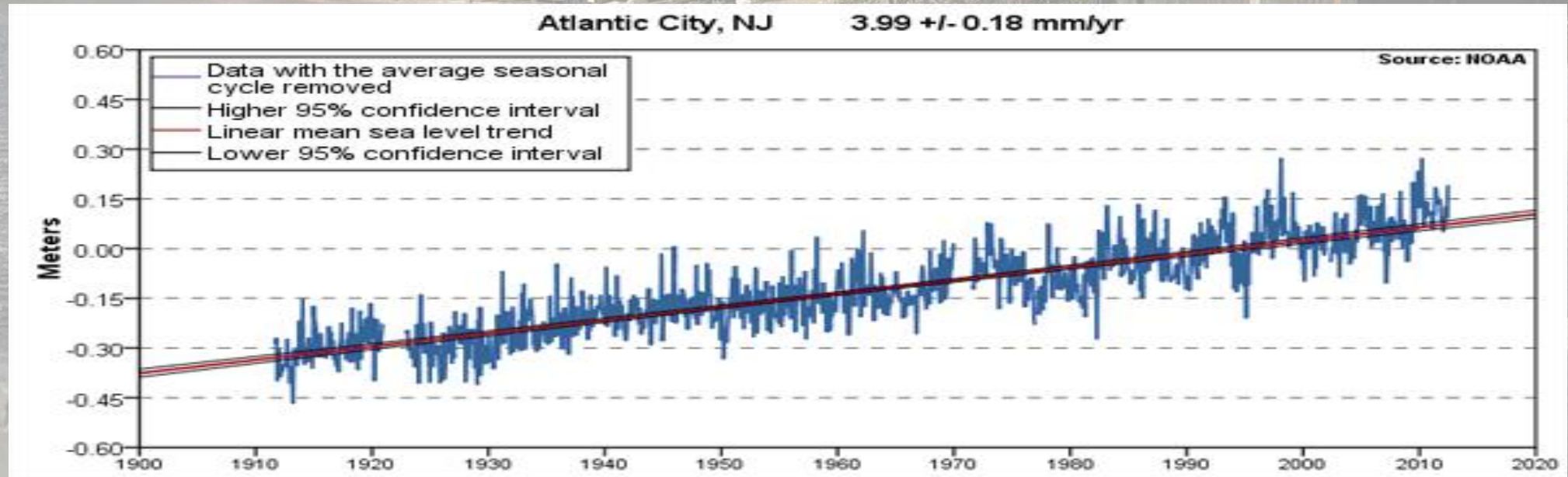
- Public outreach meeting, surveys
- Conversations and meetings with other agencies
- Plan organization and review of past plans

Importance of Surveying

- Please complete the survey and return it at the end of this meeting so we can better understand how flooding impacts you and your property.
- Be as detailed as possible: when did you see water on your street? Do streets flood when it rains? Does your neighbor's house stay dry while yours gets wet?
- Email additional information to atlanticcitycrs@gmail.com

Sea Level Rise

- Historic rate along the Jersey coast is 0.14 inches/year
- Sea level is projected to rise one foot by 2050; three feet by 2100 *assuming no changes.*



1 ft



Low-lying areas

NOA

2 ft



Venice Park Inundation

Bungalow Park Inundation

**Ducktown/Chelsea
Inundation**

3 ft



Bungalow Park inundation

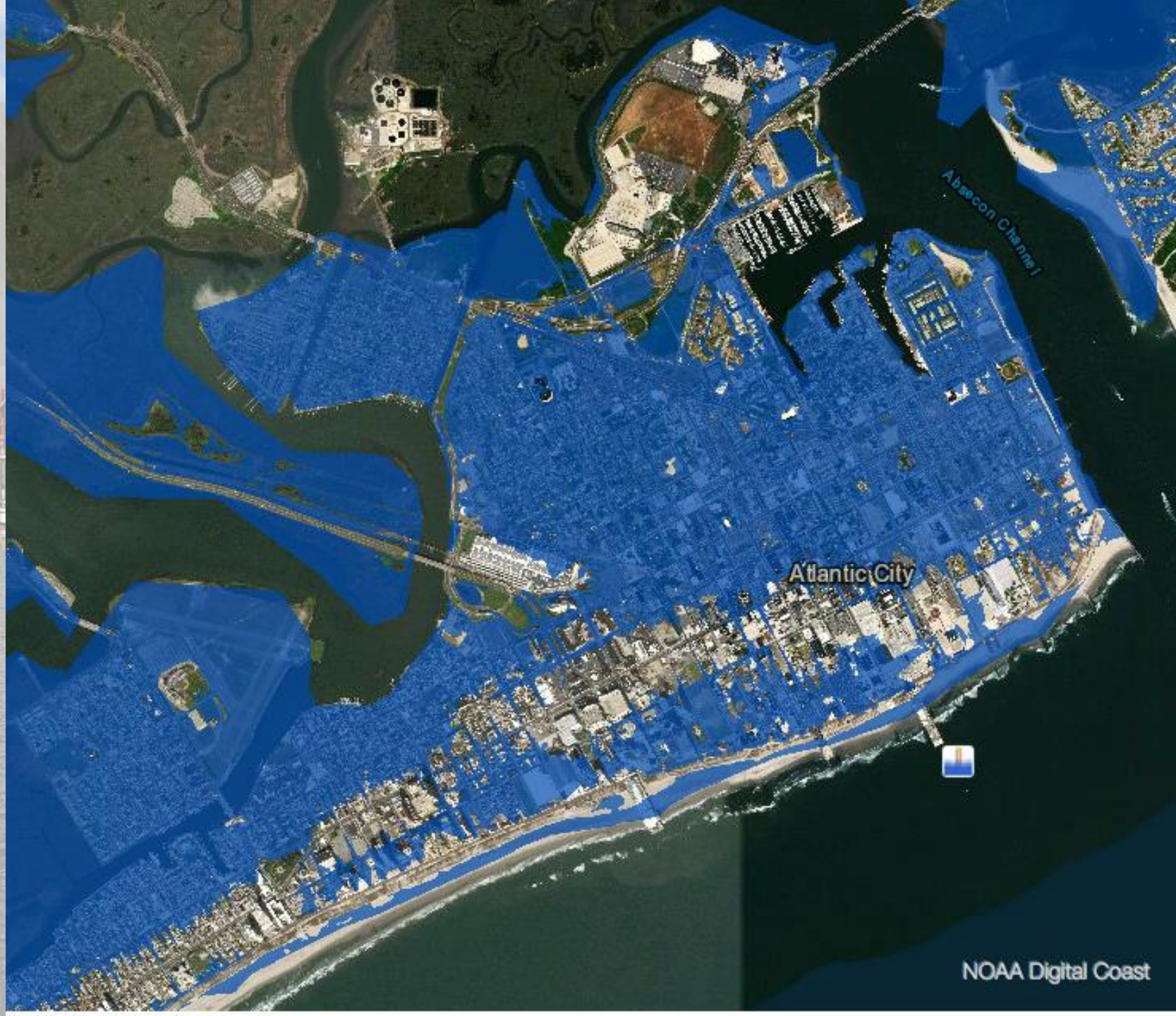
Venice Park inundation

**Northside/Midtown
Flooding**

**Chelsea, Lower Chelsea,
Ducktown back bay
flooding**

NOAA Digital

Superstorm Sandy Surge Extent



How is Flooding Being Addressed?

- Property owners have elevated their homes and improved bulkheads
- Atlantic City has is adding emergency generator, rebuilding the Baltic Avenue Canal, completed the Absecon Inlet Seawall, replacing bulkheads, built pump stations and has enhanced its flood ordinance
- Atlantic City Electric/South Jersey Gas are adding redundancy and floodproofing
- NJ Department of Environmental Protection is developing a Coastal Resiliency Plan and funding model
- Army Corps of Engineers have developed the draft New Jersey Back Bay Coastal Storm Risk Management Feasibility Study

Mitigation Initiatives - Completed

- Annapolis Avenue and Fisherman's Park Flood Gates Replaced
- Absecon Inlet Seawall
- Beach replenishments
- Mansion Avenue Pump Station
- Eighty hundred homes have been elevated since 2014

Mitigation Initiatives

Under Construction

- Caspian's Point Bulkhead
- Massachusetts Avenue Bulkhead and Pump
- Tallahassee Avenue Bulkhead
- Emergency Generators at PAL and All Wars Building

Being Planned/Permitted

- Lower Chelsea Public Bulkhead Replacement
- Partner with Army Corps to Replace Bulkheads in Chelsea/Ducktown
- Resilient Microgrid to Serve Midtown
- Baltic Avenue Canal Pump Stations
- Emergency Generators for Fire Houses

Repetitive Loss Area Analysis- What it means?

- Repetitive loss area- targeted micro-study of a neighborhood that shows clusters of properties with flood damage
- If you are in a repetitive loss area, your property (or one near to you) has had two or more flood claims totaling at least \$1,000 in the past 10 years
- Designation of “repetitive loss area” does not mean your insurance will go up- it is just a planning area used by the City to pinpoint flooding causes



City of Atlantic City
Proposed Repetitive Loss Areas

 Proposed Repetitive Loss Areas

Prepared by Rutala Associates
Data Source: Atlantic County, FEMA, NJOIT-OGIS



Repetitive Loss Areas
Venice Park
Northside
Bungalow Park
Inlet
Midtown North
Midtown South
Chelsea Beachfront
Chelsea Bayfront
Lower Chelsea
Chelsea Heights
Beach Thorofare

Action To Take to Reduce Flooding

Venice Park – elevate bulkhead construction (2000s)

Northside - elevate

Bungalow Park – elevate, Baltic Avenue Canal System, bulkheads/seawalls

Inlet – elevate, Absecon Inlet seawall

Midtown North - elevate

Midtown South – elevate, Mansion Avenue Pump Station

Chelsea Beachfront -elevate

Chelsea Bayfront – elevate, bulkheads/seawalls

Lower Chelsea – elevate, bulkheads/seawalls

Chelsea Heights – elevate, bulkheads/seawalls

Beach Thorofare -elevate homes and Wellington Avenue, bulkhead/seawalls

Home Elevation Funding

- **FEMA Flood Mitigation Assistance: Applications available now. Applicants must have NFIP flood insurance**
- **FEMA grant pays 75% -- owner pays 25 %**
- **Atlantic City was part of successful 2016 and 2017 FMA applications**
- **Repetitive loss properties are a priority – Atlantic City has gone from 340 repetitive loss properties in 2014 to 260 properties today.**
- **Increases property value, reduces flood insurance costs**

Home Elevation Funding

*Elevating your house above Base Flood Elevations (BFEs) can reduce your flood insurance premium by 50% or more! **



Next Steps

- Continue to gain public and government input.
- Complete a risk assessment – describe flooding hazards, vulnerabilities and event scenarios.
- Develop goals.
- Review activities.
- Prepare action plan.
- Public meeting to review Floodplain Management Plan
- City Council adoption.
- Implementation.

Comments and Questions

